

first programming in accordance with said at least one of said control signals, said method comprising the steps of:

10 storing computer program code at said intermediate transmission station in respect to said first programming;

inputting to a computer at said intermediate transmission station data in respect to said first programming;

1-1 transmitting at least a first of said control signals to said intermediate transmission station;

16 detecting said at least said first of said control signals at said intermediate transmission station and passing said at least said first of said control signals to said computer;

executing said stored computer program code in response to said at least said first of said control signals;

20 generating downloadable computer program code by processing said data under control of said stored computer program code;

transmitting said downloadable computer program code to said at least one subscriber station in response to a second control signal of said at least one of said control signals;

transmitting said first programming to said intermediate transmission station;

receiving said first programming at said intermediate transmission station;

transmitting said at least one control signals and said first programming from said intermediate transmission station to said at least one subscriber station; and

causing one of said at least one subscriber station, under control of said generated downloadable computer program code, to at least one of receive and present said first programming and second programming at said at least one output device, wherein said at least one control signals executes said downloadable computer code at said subscriber station.

44. (New Claim) A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of

intermediate transmission stations, each of said intermediate transmission stations having a receiver, at least one signal generator operatively connected to said receiver for generating and transferring a signal to a transmitter, an automatic control unit operatively connected to said signal generator, and a detector operatively connected to said automatic control unit for detecting  
7 at least one instruction, each automatic control unit programmed to perform in a fashion that is specific to the intermediate transmission station to which said automatic control unit belongs, wherein said fashions cause at least one of (a) second signal information content, of a second signal, generated at each one of said plurality of intermediate transmission stations to be different from second signal information content, of said second signal, generated at other ones of said plurality of intermediate transmission stations, and (b) at least one of (i) a generation of third signal information content of a third signal, at each intermediate transmission station, to occur at a first time that is different at each intermediate transmission station, and (ii) a transmission of said third signal information content, at each intermediate transmission station, to occur at a second time that is different at each intermediate transmission station, said method comprising the steps of:

18 transmitting at least one first signal from said at least one origination station, said at least one first signal including at least one generation instruction;

20 transmitting at least one transmission instruction from said at least one origination station;

receiving at each one of said plurality of intermediate transmission stations said at least one first signal;

detecting, at each one of said plurality of intermediate transmission stations, said at least one generation instruction;

receiving, at each one of said plurality of intermediate transmission stations, said at least one transmission instruction;

passing, at each one of said plurality of intermediate transmission stations, said generation instruction and said transmission instruction to said automatic control unit;

30 generating, at each one of said plurality of intermediate transmission stations, in accordance with said generation instruction and said fashion that is specific to said each one, at least one of (i) said second signal information content and (ii) said third signal information content;

transferring, at each one of said plurality of intermediate transmission stations, to said transmitter in accordance with said transmission instruction, said at least one of said second signal information content and said third signal information content, in said second signal and in said third signal, respectively; and

transmitting from each intermediate transmission station of said plurality of intermediate transmission stations, in accordance with said fashion that is specific to said each one, said at least one of said second signal information content and said third signal information content, in said second signal and in said third signal, respectively.

45. (New Claim) The method of claim 44, wherein said generation instruction instructs each of said plurality of intermediate transmission stations to generate software and said automatic control unit is programmed with data of at least one of (i) at least one formula and (ii) at least one item to be generated, said method further comprising the steps of:

transmitting an instruction from said at least one origination station which is effective at said plurality of intermediate transmission stations to at least one of (a) generate said data of at least one of (i) at least one formula and (ii) at least one item based on information stored at each of said plurality of intermediate transmission stations, (b) at least one of place said at least one of (i) at least one formula and (ii) at least one item in at least one of higher language code and a software module, (c) at least one of compile and link said generated software, and (d) generate machine language code based on said data of at least one of (i) at least one formula and (ii) at least one item.

46. (New Claim) The method of claim 44, wherein said automatic control units are programmed to respond to said at least one generation instruction at different times, said method

further comprising the step of programming at least one receiver station in said network to assemble code in response to said at least one first signal.

47. (New Claim) The method of claim 44, wherein said at least one first signal contains mass medium programming, said method further comprising the steps of:

receiving a control signal which operates at said plurality of intermediate transmitter stations to communicate said mass medium programming to said transmitter; and

retransmitting said mass medium programming from each of said plurality of intermediate transmission stations at a time that is different at each intermediate transmission station.

48. (New Claim) The method of claim 44, wherein each intermediate transmission station includes at least one selective transfer device and each automatic control unit is programmed with information of at least one of the operating speeds, connections, and capacities of said at least one selective transfer device, said method further comprising the step of transmitting from said at least one origination station an instruct signal that causes at least one of said plurality of intermediate transmission stations to perform one of (1) storing different ones of said at least one generation instruction and said at least one transmission instruction at different ones of said at least one selective transfer device and (2) storing said at least one generation instruction and said at least one transmission instruction in a specific order.

49. (New Claim) The method of claim 48, wherein the at least one selective transfer device at each intermediate transmission station comprises a computer and a memory.

50. (New Claim) The method of claim 44, wherein each automatic control unit is programmed to control at least one storage device, said method further comprising the step of instructing different ones of said plurality of intermediate transmission stations to store and retransmit different ones of said at least one generation instruction and said at least one transmission instruction.

51. (New Claim) The method of claim 44, wherein each of said plurality of intermediate transmission stations further has a switch and an automatic control unit that is programmed to control said switch, said method further comprising the step of instructing different ones of said plurality of intermediate transmission stations each to cause said switch to communicate said at least one first signal and said second signal at at least one of different times and on different channels from one another.

52. (New Claim) The method of claim 44, wherein each of said plurality of intermediate transmission stations retransmits programming on a plurality of channels, said method further comprising the step of instructing different ones of said plurality of intermediate transmission stations to transmit a specific one of said at least one first signal on different channels.

53. (New Claim) The method of claim 44, wherein a signal for comparison designates at least one of said at least one generation instruction and said at least one transmission instruction, said method further comprising the step of causing different ones of said plurality of intermediate transmission stations to retransmit at least a portion of said at least one first signal at at least one of different times and on different channels based on said signal for comparison.

54. (New Claim) The method of claim 44, further comprising the steps of:  
programming at least one of said plurality of intermediate transmission stations to select at least one of said at least one generation instruction and said at least one transmission instruction in accordance with a schedule; and  
transmitting at least a portion of said schedule from said origination stations.

55. (New Claim) The method of claim 44, wherein a retransmission control signal instructs said plurality of intermediate transmission stations to retransmit immediately, said

method further comprising the step of selecting at least one of said at least one generation instruction and said at least one transmission instruction to store and retransmit.

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56. (New Claim) The method of claim 44, wherein each automatic control unit is programmed to organize at least a portion of said at least one generation instruction and said at least one transmission instruction in a specific order, said method further comprising the step of causing different ones of said plurality of intermediate transmission stations to organize said at least one generation instruction and said at least one transmission instruction in different orders.

57. (New Claim) The method of claim 44, wherein each automatic control unit is programmed to place at least one of at least one datum and a control instruction in at least a portion of said at least one first signal, said method further comprising the step of causing different ones of said plurality of intermediate transmission stations to place different ones of said at least one of said at least one datum and said control instruction.

58. (New Claim) The method of claim 44, further comprising the step of documenting the transmission of at least one of at least a portion of said at least one first signal, at least a portion of said second signal, and at least a portion of said third signal from at least one of said plurality of intermediate transmission stations.

59. (New Claim) The method of claim 44, further comprising the step of transmitting, from said plurality of intermediate transmission stations to a remote data collection station, at least one datum of an availability of said one of said at least one of said second signal and said third signal in said network.

60. (New Claim) The method of claim 44, further comprising the step of transmitting at least one of a signal for comparison and at least one retransmission control signal from a first one of said plurality of intermediate transmission stations.

61. (New Claim) A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission stations, each of said intermediate transmission stations having a transmitter, a receiver, at least one signal generator that is operatively connected to said receiver for generating signal information content and transferring a signal containing said signal information content to said transmitter, an automatic control unit operatively connected to said signal generator, and a detector operatively connected to said automatic control unit for detecting at least one instruction, each automatic control unit being programmed to perform in a station specific fashion, said method comprising the steps of:

10 generating at least one generation instruction at said at least one origination station that instructs each of said plurality of intermediate transmission stations to generate said signal information content in accordance with said at least one generation instruction and to transfer said signal containing said signal information content to said transmitter of each of said plurality of intermediate transmission stations; and

transmitting said at least one generation instruction.

62. (New Claim) A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission stations, each of said plurality of intermediate transmission stations having a receiver, a first transmitter, at least one signal generator that is operatively connected to said receiver and that generates second signal information content and transfers a second signal containing said second signal information content to said first transmitter, an automatic control unit operatively connected to said signal generator, and a detector operatively connected to said automatic control unit for detecting at least one instruction, each automatic control unit being programmed to perform in a station specific fashion, said method comprising the steps of:

- (1) receiving a first signal;
- (2) receiving an instruct signal that instructs at least one of:

(a) a transmitter station to generate at least one generation instruction that instructs at least one of said plurality of intermediate transmission stations (i) to generate said second signal information content in accordance with said at least one generation instruction and (ii) to transfer said second signal containing said second signal information content to said first transmitter of said at least one of said plurality of intermediate transmission stations; and

(b) a receiver station to generate at least one generation instruction that instructs at least one of said plurality of intermediate transmission stations (i) to generate said second signal information content in accordance with said at least one generation instruction and (ii) to transfer said second signal containing said second signal information content to said first transmitter of said at least one of said plurality of intermediate transmission stations;

(3) receiving a transmitter control signal which operates at said at least one of said transmitter station and said receiver station to communicate said at least one generation instruction to a second transmitter; and

(4) transmitting said first signal, said instruct signal and said transmitter control signal.--